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SMART & BIGGAR
P.O. BOX 2999, STATION D
900-55 METCALFE STREET
OTTAWA, ON K1P5Y6
CANADA

EXAMINER	
VUU, HENRY	

ART UNIT	PAPER NUMBER
2179	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,414	CHIDAMBARAM ET AL.	
	Examiner	Art Unit	
	Henry Vuu	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 – 5, 12, 14 – 22, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Collmeyer et al. (Patent No. 7,024,649).

As to independent claim 1, Collmeyer et al. teaches:

A graphical interface (host interface – see e.g., col. 3, lines 13 – 18 and col. 12, line 51; i.e., the host interface generates the schematic of the desired power supply) method for producing configuration information (see e.g., col. 4, lines 59 – 67; i.e., the design tool associated with the graphical interface is used to design and define the controller's interconnection and configuration information) for control apparatus (control subsystem – see e.g., col. 4, lines 59) for a power system (power system – see e.g., col. 9, line 36) including a plurality of power supplies (power supply – see e.g., col. 9, line 38), comprising the steps of, using a processor (see e.g., col. 5, lines 1 – 4): receiving information relating to characteristics and connections of the plurality of power supplies (see e.g., col. 7, lines 20 – 36; i.e., the task of designing comprises defining their interconnections with power stages and power supply), said information determining a topology of the power system (see e.g., col. 3, lines 58 – 61; i.e., the different condition/information generated by the configuration data determines the

topology); displaying on a display device (display – see e.g., col. 23, line 45) a graphical display representing the topology of the power system (see e.g., Fig. 3 and col. 5, lines 41 – 57); receiving user input information (see e.g., col. 3, lines 58 – 61; i.e., the user input information corresponds to configuration data inputted into the user) to determine sequencing of the plurality of power supplies (col. 3, lines 58 – 61); displaying on the display device (display – see e.g., col. 23, line 45) a graphical display representing the sequencing of the plurality of power supplies (see e.g., see e.g., Fig. 3 and col. 21, lines 1 – 16; i.e., the graphical display of the sequencing and plurality of power supplies are displayed on host interface); and producing said configuration information for the control apparatus consistent with the displayed topology and sequencing of the plurality of power supplies (see e.g., col. 18, lines 45 – 59).

As to dependent claim 2, Collmeyer et al. teaches:

A method as claimed in claim 1 wherein the step of receiving said information determining a topology (see e.g., col. 3, lines 51 – 61) of the power system (power supply system – see e.g., col. 3, line 52) comprises receiving user input information for identifying information for at least one of the plurality of power supplies (see e.g., col. 5, lines 32 – 40; i.e., the design tool physically aids the designer in generating a design for a power supply system by accepting parameters) in a database (library 4 – see e.g., col. 10, lines 50 – 58; i.e., the library is a collection of data structure for simulation, wherein the designer may alter the parameters) .

As to dependent claim 3, Collmeyer et al. teaches:

A method as claimed in claim 2 wherein the step of producing said configuration information (see e.g., col. 3, lines 51 – 57; configuration data determines the structure and behavior of a power supply system as well as its output power conditions) comprises deriving information for said at least one of the plurality of power supplies (see e.g., col. 7, lines 50 – 56; i.e., deriving information from at least one power supply corresponds to the designer viewing simulation output data) from the database (see e.g., col. 13, lines 25 – 31; i.e., the design tool uses the power supply topology to produce configuration information, in which the power supply topology information resides in a data structure library).

As to dependent claim 4, Collmeyer et al. teaches:

A method as claimed in claim 1 wherein the step of displaying a graphical display (see e.g., Fig. 3) representing the topology of the power system (see e.g., Fig. 3 and col. 3, lines 50 – 61; i.e., the power system corresponds to the multi-controller of Fig. 3, wherein the designing tool generates a power supply systems topology) comprises displaying icons representing the plurality of power supplies (see e.g., Fig. 3 and col. 4, lines 9 – 11) and paths extending (connection 315 – see e.g., Fig. 3 and col. 20, line 67) to and from the icons representing input and output voltage lines of the power supplies (see e.g., Fig. 3; i.e., vout 1 through vout 5 represents voltage lines of power supplies).

As to dependent claim 5, Collmeyer et al. teaches:

A method as claimed in claim 4 wherein the step of displaying a graphical display representing the sequencing of the plurality of power supplies (see e.g., Fig. 3 and col. 21, lines 1 – 16; i.e., the graphical display of the sequencing and plurality

of power supplies are displayed on host interface) comprises displaying at least some of said icons representing the plurality of power supplies (see e.g., Fig. 3; i.e., icons corresponds to "Power Stage", "Output Load", "Input Source", "Input Source Selector", "Controller", and "Multi-Controller", wherein some icons represent power supplies) in relatively different positions along respective ones of said paths (see e.g., Fig. 3; i.e., the icons representing power supplies are displayed in relatively different positions).

As to dependent claim 12, Collmeyer et al. teaches:

A method as claimed in claim 1 wherein the step of receiving user information input (see e.g., col. 6, lines 49 – 67); i.e., the designer supplies simulation input in order to create files to simulate a condition or sequence) to determine sequencing of the plurality of power supplies (see e.g., col. 6, lines 49 – 67; i.e., the designer may modify the simulation command and output data to simulate a condition or sequence not directly supported by the design tool) comprises the steps of displaying options for possible sequencing of each of the plurality of power supplies after another of the plurality of power supplies (see e.g., col. 6, lines 63 – 67 and col. 7, lines 1 – 7; i.e., the design tool allows the designer to determine operational characteristics for power supplies, in which the designer is able to explore a wide range of possible implementations to observe the cost and effects of the desired implementations), and determining sequencing in response to user input selection of said options (see e.g., col. 7, lines 8 – 19).

As to dependent claim 14, Collmeyer et al. teaches:

A method as claimed in claim 1 wherein the graphical display representing the sequencing of the plurality of power supplies (see e.g., Fig. 3 and col. 21, lines 1 – 16; i.e., the graphical display of the sequencing and plurality of power supplies are displayed on host interface) represents startup sequencing of the power supplies (see e.g., col. 16, lines 64 – 67 and col. 17, lines 1 – 11; i.e., the template corresponds to the graphical representation of the sequencing of power supplies, wherein sequencing at startup is associated with the template), and the step of producing said configuration information (see e.g., col. 4, lines 59 – 67; i.e., the design tool associated with the graphical interface is used to design and define the controller's interconnection and configuration information) for the control apparatus (control subsystem – see e.g., col. 4, lines 59) comprises producing said configuration information for startup sequencing of the power supplies consistent with the displayed sequencing (see e.g., col. 16, lines 64 – 67 and col. 17, lines 1 – 11; i.e., the template corresponds to the graphical representation in which the computation, communication, sequencing at startup, and current sharing resources are provided by the template) and for normal shutdown of the power supplies with sequencing reversed from the startup sequencing (see e.g., col. 19, lines 20 – 24).

As to dependent claim 15, Collmeyer et al. teaches:

A method as claimed in claim 1 wherein the steps of displaying comprise representing different types of power supply by different icons (see e.g., Fig. 3; i.e., the power supplies are represented in different length and height).

As to dependent claim 16, claim 16 differs from claim 1 only in that claim 16 is an apparatus claim using a computer readable storage medium (see e.g., col. 17, lines 45 – 52) containing executable instructions (see e.g., col. 17, line 45; i.e., executable instructions corresponds to the program stored in – nonvolatile memory) that when executed cause a processor (see e.g., col. 17, line 48) to perform the steps of claim 1. Thus, claim 16 is analyzed as previously discussed with respect to claim 1 above.

As to dependent claim 17, Collmeyer et al. teaches:

A method (see e.g., col. 3, lines 19 – 27; i.e., the design tool is used to also search a library for configuring a controller using controller information from the library) of configuring control apparatus (see e.g., col. 4, lines 59 – 67; i.e., the design tool associated with the graphical interface is used to design and define the controller's interconnection and configuration information) for a power system (power system – see e.g., col. 9, line 36) including a plurality of power supplies (power supply – see e.g., col. 9, line 38), comprising the steps of producing configuration information for the control apparatus (see e.g., col. 3, lines 28 – 35; i.e., control information is generated that configures the selected controller or controllers) using the method of claim 1 (see e.g., claim 1 above), and transferring the configuration information to the control apparatus (see e.g., col. 3, lines 28 – 35; i.e., the control information configuration is generated and transferred to controllers to operate in conformance with the designer's specifications).

As to dependent claim 18, Collmeyer et al. teaches:

A graphical interface (host interface – see e.g., col. 12, line 51) method for producing configuration information (see e.g., col. 4, lines 59 – 67; i.e., the design tool associated with the graphical interface is used to design and define the controller's interconnection and configuration information) for control apparatus (control subsystem – see e.g., col. 4, lines 59) for a power system (power system – see e.g., col. 9, line 36) including a plurality of power supplies (power supply – see e.g., col. 9, line 38), comprising the steps of, using a processor (see e.g., col. 6, lines 1 – 4): in response to user input (col. 5, lines 39 – 48; i.e., the user can extract, view, and alter comprehensive design information), displaying on a display device (display – see e.g., col. 23, line 45) a graphical display representing the topology (see e.g., Fig. 3 and col. 5, lines 41 – 57) and sequencing of the plurality of power supplies of the power system (see e.g., see e.g., Fig. 3 and col. 21, lines 1 – 16; i.e., the graphical display of the sequencing and plurality of power supplies are displayed on host interface); and producing said configuration information for the control apparatus consistent with the displayed topology and sequencing of the plurality of power supplies (see e.g., col. 18, lines 45 – 59).

As to dependent claim 19, Collmeyer et al. teaches:

A graphical interface (host interface – see e.g., col. 12, line 51) method for producing configuration information (see e.g., col. 4, lines 59 – 67; i.e., the design tool associated with the graphical interface is used to design and define the controller's interconnection and configuration information) for control apparatus (control subsystem – see e.g., col. 4, lines 59) for a power system

(power system – see e.g., col. 9, line 36) including a plurality of power supplies (power supply – see e.g., col. 9, line 38), comprising the steps of, using a processor (see e.g., col. 5, lines 1 – 4): in response to user input (col. 6, lines 39 – 48; i.e., the user can extract, view, and alter comprehensive design information), selecting power supplies (see e.g., col. 5, lines 41 – 57; i.e., the designer supplies power supply parameters which describe the power supply system) using a database (see e.g., col. 6, lines 13 – 14; circuit elements reside in library 4); in response to user input (col. 6, lines 39 – 48; i.e., the user can extract, view, and alter comprehensive design information), determining sequencing of the power supplies (col. 21, lines 1 – 16; i.e., the designer can specify or modify the sequencing of power supplies); displaying on a display device a graphical display representing the power supplies and their sequencing (see e.g., Fig. 3); and producing said configuration information for the control apparatus consistent with the displayed sequencing of the power supplies (see e.g., col. 18, lines 45 – 59) and using information from the database for the selected power supplies (see e.g., col. 13, lines 25 – 31).

As to dependent claim 20, Collmeyer et al. teaches:

A method as claimed in claim 19 wherein the step of displaying a graphical display representing the power supplies and their sequencing (see e.g., Fig. 3; i.e., Fig. 3 is a graphical display of power supplies, such as "Power Stage", "Output Load", "Input Source", "Input Source Selector", "Controller", and "Multi-Controller", wherein some icons represent power supplies) comprises displaying icons representing the plurality of power supplies (see e.g., Fig. 3; i.e., icons

corresponds to "Power Stage", "Output Load", "Input Source", "Input Source Selector", "Controller", and "Multi-Controller") and displaying paths (connection 315 – see e.g., Fig. 3 and col. 20, line 67) extending to and from the icons (see e.g., Fig. 3) representing input and output voltage lines of the power supplies (see e.g., Fig. 3; i.e., vout 1 through vout 5 represents voltage lines of power supplies).

As to dependent claim 21, Collmeyer et al. teaches:

A method as claimed in claim 20 wherein the step of displaying icons comprises representing different types of power supply by different icons (see e.g., Fig. 3; i.e., the power supplies are represented in different length and height).

As to dependent claim 22, Collmeyer et al. teaches:

A method as claimed in claim 20 wherein the step of displaying further comprises displaying at least some of said icons representing the power supplies (see e.g., Fig. 3; i.e., icons corresponds to "Power Stage", "Output Load", "Input Source", "Input Source Selector", "Controller", and "Multi-Controller", wherein some icons represent power supplies) in relatively different positions along respective ones of said paths to represent the sequencing of the power supplies paths (see e.g., Fig. 3; i.e., the icons representing power supplies are displayed in relatively different positions).

As to dependent claim 25, claim 25 differs from claim 19 only in that claim 25 is an apparatus claim using a computer readable storage medium (see e.g., col. 17, lines 45 – 52) containing executable instructions (see e.g., col. 17, line 45; i.e., executable instructions corresponds to the program stored in –

nonvolatile memory) that when executed cause a processor (see e.g., col. 17, line 48) to perform the steps of claim 19. Thus, claim 25 is analyzed as previously discussed with respect to claim 19 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 – 11, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collmeyer et al. (Patent No. 7,024,649) in view of Boros et al. (Patent No. 7,135,789).

As to dependent claim 6, Collmeyer et al. teaches a graphical interface (host interface – see e.g., col. 3, lines 13 – 18 and col. 12, line 51; i.e., the host interface generates the schematic of the desired power supply) for producing configuration information (see e.g., col. 3, lines 28 – 35; i.e., configuration information is generated to configure controllers of a power system) for a control apparatus (see e.g., col. 3, lines 28 – 35; i.e., the control apparatus corresponds to control subsystems) for a power system (see e.g., col. 9, line 36) including a plurality of power supplies (see e.g., col. 9, line 38) using a processor (see e.g., col. 5, lines 1 – 4) which receives information relating to characteristics and connections of the plurality of power supplies (see e.g., col. 7, lines 20 – 36; i.e.,

the task of designing comprises defining their interconnections with power stages and power supply), wherein the information includes determining a topology of the power system (see e.g., col. 3, lines 58 – 61; i.e., the different condition/information generated by the configuration data determines the topology), and displaying on a display device (display – see e.g., col. 23, line 45) a graphical display representing the topology of the power system (see e.g., Fig. 3 and col. 5, lines 41 – 57). Collmeyer et al. further teaches receiving user input information (see e.g., col. 3, lines 58 – 61; i.e., the user input information corresponds to configuration data inputted into the user) to determine the sequencing of the plurality of power supplies (col. 3, lines 58 – 61), displaying on the display device (display – see e.g., col. 23, line 45) a graphical display representing the sequencing of the plurality of power supplies (see e.g., see e.g., Fig. 3 and col. 21, lines 1 – 16; i.e., the graphical display of the sequencing and plurality of power supplies are displayed on host interface), producing the configuration information for the control apparatus consistent with the displayed topology and sequencing of the plurality of power supplies (see e.g., col. 18, lines 45 – 59), displaying icons representing the plurality of power supplies (see e.g., Fig. 3 and col. 4, lines 9 – 11) and paths extending (connection 315 – see e.g., Fig. 3 and col. 20, line 67) to and from the icons representing input and output voltage lines of the power supplies (see e.g., Fig. 3; i.e., vout 1 through vout 5 represents voltage lines of power supplies), and displaying at least some of the icons representing the plurality of power supplies (see e.g., Fig. 3; i.e., icons corresponds to "Power Stage", "Output Load", "Input Source", "Input Source

Selector", "Controller", and "Multi-Controller", wherein some icons represent power supplies) in relatively different positions along respective ones of the paths (see e.g., Fig. 3; i.e., the icons representing power supplies are displayed in relatively different positions). Collmeyer et al. does not teach displaying at least one additional symbol representing the sequencing. Boros et al. teaches displaying a symbol representing the sequencing (see e.g., col. 5, lines 59 – 64; i.e., icons 20 through 25 represent state machines, wherein the arrows represent the topology of the power-up sequence). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the graphical interface, configuration information, control apparatus, power system, power supplies, processor, receiving connection information including topology and sequencing information of Collmeyer et al. with displaying a symbol representing the sequence of Boros et al. because the separated symbol representing sequencing allows the user to visually comprehend that icon 22 and icon 23 are separately dependent to enable its respective controlled power supply (see e.g., col. 6, lines 53 – 59).

As to dependent claim 7, this claim is analyzed as previously discussed with respect to claim 6 above. Collmeyer et al. teaches a displaying a graphical display representing the sequencing of the plurality of power supplies (see e.g., see e.g., Fig. 3 and col. 21, lines 1 – 16; i.e., the graphical display of the sequencing and plurality of power supplies are displayed on host interface) but does not teach the at least one additional symbol comprises an arrow

representing the sequencing. Boros et al. teaches displaying a symbol representing the sequencing (see e.g., Fig. 2 and col. 5, lines 59 – 64; i.e., icons 20 through 25 represent state machines, wherein the arrows represent the topology of the power-up sequence), wherein the symbol comprises an arrow representing the sequencing (see e.g., Fig. 2 and col. 5, lines 51 – 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the graphical interface, configuration information, control apparatus, power system, power supplies, processor, receiving connection information including topology and sequencing information of Collmeyer et al. with displaying a symbol representing the sequence of Boros et al. because the separated symbol representing sequencing allows the user to visually comprehend that icon 22 and icon 23 are separately dependent to enable its respective controlled power supply (see e.g., col. 6, lines 53 – 59).

As to dependent claim 8, this claim is analyzed as previously discussed with respect to claim 1 above. Collmeyer et al. teaches displaying a graphical display representing the sequencing (see e.g., Fig. 3 and col. 21, lines 1 – 16; i.e., the graphical display of the sequencing and plurality of power supplies are displayed on host interface) of the power system (see e.g., col. 9, line 36), which comprises displaying icons representing the plurality of power supplies (see e.g., Fig. 3; i.e., icons corresponds to "Power Stage", "Output Load", "Input Source", "Input Source Selector", "Controller", and "Multi-Controller", wherein some icons represent power supplies), but does not teach displaying at least one additional

symbol representing the sequencing. Boros et al. teaches displaying a symbol representing the sequencing (see e.g., Fig. 2 and col. 5, lines 59 – 64; i.e., icons 20 through 25 represent state machines, wherein the arrows represent the topology of the power-up sequence). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the graphical interface, configuration information, control apparatus, power system, power supplies, processor, receiving connection information including topology and sequencing information of Collmeyer et al. with displaying a symbol representing the sequence of Boros et al. because the separated symbol representing sequencing allows the user to visually comprehend that icon 22 and icon 23 are separately dependent to enable its respective controlled power supply (see e.g., col. 6, lines 53 – 59).

As to dependent claim 9, this claim is analyzed as previously discussed with respect to claim 8 above. Collmeyer et al. teaches displaying a graphical display representing the sequencing (see e.g., Fig. 3 and col. 21, lines 1 – 16; i.e., the graphical display of the sequencing and plurality of power supplies are displayed on host interface) of the power system (see e.g., col. 9, line 36), which comprises displaying icons representing the plurality of power supplies (see e.g., Fig. 3; i.e., icons corresponds to "Power Stage", "Output Load", "Input Source", "Input Source Selector", "Controller", and "Multi-Controller", wherein some icons represent power supplies), but does not teach the at least one additional symbol comprises an arrow representing the sequencing. Boros et al. teaches displaying

a symbol representing the sequencing (see e.g., Fig. 2 and col. 5, lines 59 – 64; i.e., icons 20 through 25 represent state machines, wherein the arrows represent the topology of the power-up sequence), wherein the symbol comprises an arrow representing the sequencing (see e.g., Fig. 2 and col. 5, lines 51 – 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the graphical interface, configuration information, control apparatus, power system, power supplies, processor, receiving connection information including topology and sequencing information of Collmeyer et al. with displaying a symbol representing the sequence of Boros et al. because the separated symbol representing sequencing allows the user to visually comprehend that icon 22 and icon 23 are separately dependent to enable its respective controlled power supply (see e.g., col. 6, lines 53 – 59).

As to dependent claim 10, this claim is analyzed as previously discussed with respect to claim 8 above. Collmeyer et al. teaches at least one additional symbol (see e.g., Fig. 3; i.e., "Vout 1" through "Vout 5" corresponds to additional symbols within the design of a power system) comprises at least one sequence number representing the sequence (see e.g., Fig. 3; i.e., "Vout 1" through "Vout 5" are symbols that represent sequence numbers for ordered sequencing).

As to dependent claim 11, this claim is analyzed as previously discussed with respect to claim 8 above. Collmeyer et al. teaches displaying a graphical display representing the sequencing (see e.g., Fig. 3 and col. 21, lines 1 – 16;

i.e., the graphical display of the sequencing and plurality of power supplies are displayed on host interface) of the power system (see e.g., col. 9, line 36), and displaying paths extending (connection 315 – see e.g., Fig. 3 and col. 20, line 67) to and from the icons representing input and output voltage lines of the power supply (see e.g., Fig. 3; i.e., vout 1 through vout 5 connection lines represent voltage lines of power supplies),.

As to dependent claim 23:

Claim 23 incorporates substantially similar subject matter as claimed in claim 6, and are respectfully rejected along the same rationale.

As to dependent claim 24:

Claim 24 incorporates substantially similar subject matter as claimed in claim 7, and are respectfully rejected along the same rationale.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collmeyer et al. (Patent No. 7,024,649) in view of Lee et al. (Publication No. 2005/0010872).

As to dependent claim 13, Collmeyer et al. teaches a graphical interface (host interface – see e.g., col. 3, lines 13 – 18 and col. 12, line 51; i.e., the host interface generates the schematic of the desired power supply) for producing configuration information (see e.g., col. 3, lines 28 – 35; i.e., configuration information is generated to configure controllers of a power system) for a control

apparatus (see e.g., col. 3, lines 28 – 35; i.e., the control apparatus corresponds to control subsystems) for a power system (see e.g., col. 9, line 36) including a plurality of power supplies (see e.g., col. 9, line 38) using a processor (see e.g., col. 5, lines 1 – 4) which receives information relating to characteristics and connections of the plurality of power supplies (see e.g., col. 7, lines 20 – 36; i.e., the task of designing comprises defining their interconnections with power stages and power supply), wherein the steps of receiving user information input (see e.g., col. 6, lines 49 – 67); i.e., the designer supplies simulation input in order to create files to simulate a condition or sequence) to determine sequencing of the plurality of power supplies (see e.g., col. 6, lines 49 – 67; i.e., the designer may modify the simulation command and output data to simulate a condition or sequence not directly supported by the design tool) comprises the steps of displaying options for possible sequencing of each of the plurality of power supplies after another of the plurality of power supplies (see e.g., col. 6, lines 63 – 67 and col. 7, lines 1 – 7; i.e., the design tool allows the designer to determine operational characteristics for power supplies, in which the designer is able to explore a wide range of possible implementations to observe the cost and effects of the desired implementations), and determining sequencing in response to user input selection of the options (see e.g., col. 7, lines 8 – 19), but does not teach displaying a matrix having different representations for selected, selectable, and nonselectable options. Lee et al. teaches a matrix (see e.g., Fig. 5 and para. [0022], lines 9 – 12; i.e., Fig. 5 is a table displayed to the user in order to visually indicate selected, selectable, and nonselectable options) having different

representation for selected, selectable, and nonselectable options (see e.g., Fig. 5 and para. [0022], lines 13 – 32; i.e., representation for selected, selectable, and nonselectable options can include variations in color and shape in order to distinguish the options of selected, selectable, and nonselectable options). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the graphical interface for producing configuration information of a power system of Collmeyer et al. with the distinguishable options of selected, selectable, and nonselectable matrix of Lee et al. because the matrix of Lee et al. allows clarity of enabled and disabled checkboxes, further a clarifying distinction of selected, selectable, and non selectable options (see e.g., para. [0022]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art Patent No. 6,110,213 can be applicable and pertinent to applicant's disclosure. Prior art disclosed by Vinciarelli et al. teaches a power design system for aiding users to design a custom power supply, wherein a form is used to input voltage range, frequency of AC input voltage, connecting components of a power system by using a drawing tool.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Vuu whose telephone number is (571) 270-1048. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Henry Vuu

11/20/2006

BA HUYNH
PRIMARY EXAMINER